

FORESTRY, FIRE & STATE LANDS REQUEST FOR PROPOSALS Cover Sheet



Project Title	Mercury Contamination in Waterbird Eggs and Risk to Avian Reproduction in Wetlands of the Great Salt Lake, Utah		
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Project Description / Abstract	We propose to examine the bioaccumulation of highly toxic methylmercury to sensitive waterbirds breeding in Great Salt Lake (GSL) wetlands. GSL provides critical breeding habitat for numerous waterbird species, and mercury (Hg) has been previously found at high levels within the GSL ecosystem. However, little information exists on the risk of Hg to breeding birds in the area and whether or not Hg is impairing bird reproduction. In this study, we will evaluate Hg bioaccumulation into the eggs of several waterbird species that represent distinct foraging ecology, and compare measured Hg concentrations to reproductive toxicity endpoints in order to assess relative risk to birds. Additionally, we will evaluate which wetlands are at particular risk to Hg by measuring Hg concentrations in eggs from numerous colonies of American avocets - a widely dispersed breeding bird that has been previously developed as an effective biosentinel of Hg-contaminated San Francisco Bay Ecosystem. Our results will have direct implications for wetland management in the GSL and Bear River Migratory Bird Refuge.		
	Amount Requested	Matching Funds	Total Project Cost
Project Funding	\$74,791	\$13,901	\$88,692